REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicants respectfully submit that the pending claims comply with 35 U.S.C. §§ 101 and 112, are not anticipated under 35 U.S.C. § 102 and are not rendered obvious under 35 U.S.C. § 103. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance,** the applicants respectfully request that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.

The applicants will now address each of the issues raised in the outstanding Office Action.

Rejections under 35 U.S.C. § 101

Claims 1, 2, 5-15, 18-41, 83, 84 and 86-88 stand rejected under 35 U.S.C. 101, as being directed to non-statutory subject matter. The applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

These claims have been amended to be more clearly directed to statutory subject matter.

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Rejections under 35 U.S.C. § 112

Claims 2-4, 12, 13, 15-17, 25, 26, 28-30, 38, 39, 43-45, 53. 54, 66, 67, 69-71, 79 and 80 stand rejected under 35 U.S.C. § 112, ¶ 2 as being incomplete for omitting essential elements. The applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

First, since claims 3, 4, 16, 17, 44 and 45 have been canceled in the entered after-final amendment filed on May 14, 2007, this ground of rejection is rendered moot with respect to these claims.

The Examiner cites MPEP § 2172.01. MPEP § 2172.01 states, in pertinent part:

> A claim which omits matter **disclosed to be essential to the invention** as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See also MPEP § 2164.08(c). Such essential matter may include missing elements, steps or necessary structural cooperative relationships of elements **described by the applicant(s) as necessary to practice the invention**. [Emphasis added.]

The applicants will refer to this test in addressing the Examiner's rejection.

Regarding claims 2, 15, 28-30, 43 and 69-71, the Examiner contends that there appears to be a missing step of **targeting** or **serving** advertisements. (See Paper No. 20061008, page 2.) However, neither targeting, nor

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serving, are essential steps. As the specification
states:

> The present invention may involve novel
> methods, apparatus, message formats
> and/or data structures for **suggesting**
> and/or **providing** keywords used to
> target ads (referred to as "targeting
> keywords"). [Emphasis added.]

Page 8, lines 10-12. This can be done before an
advertisement is ever served. For example, the
specification further states:

> For advertisers with **new campaigns**, the
> advertiser can enter ad information,
> such as a creative for example. The
> keyword facility may use this entered
> information as seed information to
> infer one or more categories. It may
> then request that the advertiser
> confirm or deny some basic feedback
> information (e.g., categories, Webpage
> information, etc.). For example, an
> advertiser may be provided with
> candidate categories and may be asked
> to confirm (e.g., using checkboxes)
> which of the categories are relevant to
> their ad. In one embodiment, the ad
> server system may then automatically
> provide keywords to the advertiser for
> its ad. [Emphasis added.]

Page 6, lines 13-21. Moreover, the independent claims
from which these claims depend, determine targeting
keywords (or serving constraints) which may be provided,
perhaps subject to advertiser approval or qualification
testing.

In any event, since the applicants have described
that the keywords or serving constraints may be provided
to an advertiser when they are setting up a new ad

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campaign, acts of targeting ads or serving ads are clearly <u>not</u> described as being essential to the practice of the invention by the applicants. Therefore, the applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection.

Furthermore, independent claims 1, 27, 42 and 68, as amended, recite **controlling the serving of the advertisement using stored targeting keywords.**

Regarding claims 12, 13, 25, 26, 38, 39, 53, 54, 66, 67, 79 and 80, the Examiner contends that it is unclear how "unused inventory" and "unused ad spots" are determined, and recommended language reciting how such a determination might be made. Although these claims were amended to clarify what is meant by an "unused ad spot," the applicants declined to amend the claims as proposed by the Examiner because the claims do not require "**determining**" unused ad spots or unused inventory. As one example, such information might already be available and simply accepted. For example, the specification states:

> In one embodiment of the present invention, the keyword suggestion/provision operations 460 **may use** unused inventory information 455 in its determination of keywords. For example, such unused inventory information 455 may associate keywords with a number of unused ad spots over a period of time. Generated targeting keywords 465 may be ordered based on number of unused ad spots associated with the keywords. In this way, keywords that, if used as targeting keywords, would fill many otherwise

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> unused ad spots may be preferred over
> those that would fill few otherwise
> unused ad spots. [Emphasis added.]

Page 19, lines 23-30. Thus, some embodiments might **use** unused inventory information. Although the specification does describe how such unused inventory information might be determined (See, e.g., page 20, lines 1-15.), the applicants never indicated that such a determination is necessary or essential.

Since the applicants have demonstrated that **determining** unused ad spots or unused inventory is not an essential or necessary act of the invention, the applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection.

Rejections under 35 U.S.C. § 102

Claims 1, 3-10, 14, 16-23, 27, 29-36, 40-42, 44-51, 55, 59-64, 68, 70-77, 81-84 and 86-88 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2003/0055816 ("the Paine publication"). The applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

First, since claims 3, 4, 16, 17, 40, 41, 44 and 45 have been canceled in the entered after-final amendment filed on May 14, 2007, this ground of rejection is rendered moot with respect to these claims.

Various patentable features of the claimed invention will be described below with respect to separate groups of claims. The Paine publication provides a tool for

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finding good search terms for an advertiser's Website
while getting rid of the bad ones (See, e.g., paragraph
0012.), while the present invention concerns determining
one or more keywords (or some other serving constraints
which may be used for ad targeting). However, there are
significant, and patentable, differences between the
Paine publication and the claimed invention.

The Paine Publication

The Paine publication makes search term
recommendations by (i) looking for good search terms
directly on an advertiser's Website (referred to as
"spidering"), and/or (ii) comparing an advertiser to
other, similar, advertisers and recommending the search
terms those other advertisers have chosen (referred to as
"collaborative filtering"). In at least one embodiment,
the output of the spidering step is used as input to the
collaborative filtering step. (See, e.g., paragraph
0013.) These techniques are discussed with reference to
Figures 10-20 of the Paine publication.

Spidering in the Paine Publication

Spidering is a known technology for downloading a
Website rooted at a uniform resource locator (URL).
Specifically, a home page of the Website specified by the
URL is downloaded and scanned for hyperlinks to other
pages, which are similarly downloaded and scanned until
the program reaches a predefined link depth, downloads a
predetermined number of pages, or reaches some other
stopping criterion. (See, e.g., paragraph 0096.)

Search terms may be determined from this spidering.
The search terms may be scored using two factors -- (i)

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how common a search term is on the World Wide Web, and
(ii) how often users search for it. The search terms may
then be sorted by either the score quality or by the
number of times they have occurred in the downloaded
pages. (See, e.g., paragraph 0097.)

As can be appreciated from the foregoing,
determining search term recommendations from spidering
simply uses terms found in the advertiser's Website, but
not "categories".

Collaborative Filtering in the Paine Publication

Generally, collaborative filtering is used to make
recommendations based on user similarity. In the case of
the Paine publication, collaborative filtering is used to
make recommendations based on advertiser similarity in
terms of search terms that they have used for their ads.
More specifically, the Paine publication computes the
Pearson correlation between a new advertiser and all of
the existing advertisers using a numeric rating (e.g., 0
to 5) assigned to each entry in an advertiser/term table.
An existing advertiser might get a rating of 5 for every
term that it has bid on and a rating of UNKNOWN for every
other term. The new advertiser (to which recommendations
are to be made) might get a rating of 5 for terms it has
accepted, a 1 for terms that it has rejected, and a 2 for
every other term. (See, e.g., paragraph 0102.)

Once the collaborative filter has computed the
correlation between the new advertiser and the existing
advertisers (that is, how similar the new advertiser is
to various existing advertisers), the collaborative
filter predicts how likely it is that each term is a good

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search term for the new advertiser. (See, e.g., paragraph .0104.)

As can be appreciated from the foregoing, determining search term recommendations from search terms used by other advertisers using collaborative filtering does not use "categories."

Combining Spidering and Collaborative Filtering in the Paine Publication

Spidering and collaborative filtering may be used in combination. For example, spidering may provide recommended search terms which a new advertiser may accept or reject. Given such an initial list of accepted and rejected search terms (which may have ratings based on whether or not the terms were accepted or rejected), collaborative filtering may be used to provide an updated list of search terms which may be accepted or rejected by the new advertiser. Collaborative filtering may be run repeatedly based on the latest list of accepted or rejected search terms until the user is satisfied. (See, e.g., paragraphs 0107-0112 and Figure 10.)

As can be appreciated from the foregoing, determining search term recommendations using a combination of spidering and collaborative filtering does not use "categories."

The Examiner's Interpretation of the Paine Patent

The Examiner is apparently interpreting (1) accepting at least one category as reading on accepting the "spidering" results in the Paine publication, and (2) determining one or more keywords from using the accepted at least one category as reading on using the "spidering"

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results to get "collaborative filtering" results in the Paine publication. To reach this conclusion, the Examiner is interpreting **"category"** to include keywords. However, in exemplary embodiments consistent with the present invention, each of a number of categories is associated with one or more keywords. Consequently, a category can be used to lookup one or more keywords. As one example, Figure 3 of the present application includes an index 350 in which a category 352 can be used as a key to obtain associated keywords 354.

The applicants continue to disagree with the Examiner's interpretation of "category". The ordinary meaning of category is a defined class in a classification system. In the context of the Internet and e-commerce, those skilled in the art appreciate that categories typically pertain to product and service categories. For example, the Website Amazon.com includes product categories including Books, Music, DVD, VHS, Magazines & Newspapers, Computer & Video Games, Software, Electronics, Audio & Video, Camera & Photo, Cell Phones & Service, Computers, Office Products, Musical Instruments, Home & Garden, Automotive, Bed & Bath, Furniture & Décor, Gourmet Food, Kitchen & Housewares, Outdoor Living, Pet Supplies, Tools & Hardware, Apparel & Accessories, Shoes, Jewelry & Watches, Beauty, Health & Personal Care, Sports & Outdoors, Toys & Games and Baby.

The use of the term "category" in the specification is consistent with the ordinary meaning of category and its meaning in the context of e-commerce. For example, in the illustrative example provided in § 4.3 of the specification, it is described that:

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Category determinations operations 410
may determine various, possibly relevant,
categories (and possibly sub-categories)
such as:
automobiles ...
computers ... operating systems ...
music ... popular music ...
music ... musical instruments ...
animals ... mammals ... felines ...
movies ... foreign films ...
travel ... resorts ...
sports & recreation ... snorkeling ... scuba ...
sports & recreation ... football ...
pets ... fish

Page 25, lines 13-26. Embodiments consistent with the
present invention use associations between categories and
keywords to suggest appropriate keywords. Using
categories allows the suggestion of irrelevant keywords
(that might occur due to the fact that some words, like
"Jaguar" for example, can have multiple meanings), to be
avoided.

On the other hand, although the Paine publication
also recommends or suggests search terms used when
serving ads, it does not use *categories* as claimed.
Rather, it uses spidering (which uses keywords found on a
Website -- *not categories*) and/or collaborative filtering
(which uses keywords from other advertisers considered to
be similar to the new advertiser, *not categories*, based
on their use of common keywords) as described above.

The Examiner uses the fact that "automobile" is used
as an example of a search term in the Paine publication
and a category in the present application in an attempt
to prove that search terms and keywords are the same as
categories. *However, the fact that a particular term
might be used as a label representing a category does not*

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mean that the same term, when used as a search term, represents a category. Thus, the applicants respectfully submit that the rejection rests on an improper interpretation of "category" -- one that violates Phillips v. AWH Corp., 75 U.S.P.Q.2d 1321 (Fed. Cir. July 12, 2005) (en banc) (referred to as "Phillips v. AWH" below). That is, when interpreting the term "category," the Examiner improperly ignores the specification as it would be interpreted by one of ordinary skill in the art. In Phillips v. AWH, the Court of Appeals for the Federal Circuit ("the CAFC") stated:

> the specification "is always highly
> relevant to the claim construction
> analysis. Usually, it is
> dispositive; it is the single best
> guide to the meaning of a disputed
> term."

Id., at 1327, quoting from Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

Patentable Features of the Claimed Invention

Having introduced the Paine publication, various patentable features of the claimed invention are discussed.

As an initial matter, the Examiner alleges that the claimed category reads on a "word." In the Examiner's Answer, the Examiner uses the fact that "automobile" is used as an example of a search term in the Paine publication and a category in the present application in an attempt to prove that search terms and keywords are the same as categories. *However, the fact that a particular term might be used as a label representing a*

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category does not mean that the same term, when used as a search term, represents a category. Specifically, the Examiner's argument is apparently that since certain words might sometimes be a label representing a category, a word is inherently a category. This is clearly improper under the well-established case law which requires that an anticipatory inherent feature or result be consistent, necessary and inevitable, not merely possible or probable. (See, e.g., Transclean Corp. v. Bridgewood Services, Inc., 62 U.S.P.Q.2d 1865 (Fed. Cir. 2002); See also, Eli Lilly & Co. v. Barr Laboratories, Inc., 58 U.S.P.Q.2d 1865 (Fed. Cir. 2001), cert. denied, 122 S.Ct. 913 (2002).) That is, the Examiner's allegation that a particular word might be used as a label representing a category constitutes, at best, a possible result (not a consistent, necessary, or inevitable result) under the applicable case law. A possible (or accidental) result does not constitute an anticipation.

The Examiner also argues that the Applicant's specification uses "category" and "keyword" interchangeably to perform the same functions, and as an example cites that keywords can be used to lookup categories and categories can be used to lookup keywords. The applicants respectfully disagree for reasons set forth below. In addition, the facts that (1) keywords can be used to lookup categories, and (2) categories can be used to lookup keywords does not make them equivalent. For example, a keyword can "belong to" one more categories, and a category may "include" one or more keywords. These are clearly different relationships.

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The Examiner also alleges that the applicants never specifically define category. However, a specific definition is not required. In any event, as discussed on pages 16-19 of the Appeal Brief, the term "category" has an established definition in the art of electronic advertising and electronic commerce, and examples, consistent with this well-established meaning, are provided in the specification. Thus, the Examiner's interpretation of "categories" is inconsistent with both (1) the interpretation that one of ordinary skill in the art would have used and (2) the specification, and is therefore improper. (See MPEP 2111.)

To summarize, the claimed "categories" cannot be properly characterized as "keywords".

Claims 1, 14, 42 and 55

First, independent claims 1 and 42, as amended, recite controlling the serving of the advertisement using stored targeting keywords. This overcomes the Examiner's "mere intended use" based arguments on page 8 of the Examiner's Answer.

Independent claims 1, 14, 42, and 55 are not anticipated by the Paine publication because the Paine publication does not teach an act of (or means for) *looking up one or more keywords using a category*. Even assuming, arguendo, that "category" reads on the keywords returned by spidering in the Paine publication as alleged by the Examiner, these alleged categories are not used to "*look up*" keywords. To reiterate, the Paine publication computes the Pearson correlation between a new advertiser and all of the existing advertisers using a numeric

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rating (e.g., 0 to 5) assigned to each entry in an advertiser/term (apparently, the Examiner interprets "term" as being read on by "category") table. An existing advertiser might get a rating of 5 for every term that it has bid on and a rating of UNKNOWN for every other term. The new advertiser (to which recommendations are to be made) might get a rating of 5 for terms it has accepted, a 1 for terms that it has rejected, and a 2 for every other term. (See, e.g., paragraph 0102.) Once the collaborative filter has computed the correlation between the new advertiser and the existing advertisers (that is, how similar the new advertiser is to various existing advertisers), the collaborative filter predicts how likely it is that each term is a good search term for the new advertiser. (See, e.g., paragraph 0104.) *This collaborative filtering process to get terms (alleged to be keywords) used by other advertisers from existing terms (alleged to be categories) is <u>not</u> using a category to lookup one or more keywords.* Accordingly, independent claims 1, 14, 42, and 55 are not anticipated by the Paine publication for at least this reason.

The Examiner had argued that "looking up" is a broad term and that the Paine publication uses a word to look up other words. The applicants respectfully disagree.

First, "looking up" has a well-established meaning in the art (a function in which a previously constructed index or table of values is searched for a desired item or items of information), and the use of the term in the specification is consistent with this meaning in the art. Note also that dependent claims 5, 18, 31, 46, 59 and 72 recite that the lookup uses an index. Using an index is also consistent with this well-established meaning of

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looking up in the art. Thus, the Examiner's interpretation of "lookup" or "looking up" is inconsistent with both (1) the interpretation that one of ordinary skill in the art would have used and (2) the specification, and is therefore improper. (See MPEP 2111.)

Claims 86-88

First, since claims 86 and 87 depend from claims 1 and 14, respectively, they are not anticipated by the Paine publication for at least the reasons discussed above with reference to claims 1 and 19. Second, since claim 88 depends from claim 27, it is not anticipated by the Paine publication for at least the reasons discussed below.

Further, claims 86-88 recite a relationship between categories and keywords (or serving constraints) which would enable a lookup such as that discussed above. Specifically, these claims recite that each of the one or more categories is specifically associated with one or more keywords (or serving constraints). The use of collaborative filtering in the Paine publication to get terms (alleged to be keywords) used by other advertisers from existing terms (alleged to be categories) does not specifically associate the existing terms with the terms used by other advertisers. Therefore, claims 86-88 are not anticipated by the Paine publication for at least this additional reason.

The Examiner had argued that in the Paine publication, "if a program is able to get one set of terms from another set of terms, those two sets of terms

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have to be inherently 'associated'." This argument
ignores the fact that these claims further recite that
the association is used to lookup keywords. That is, in
claims 86 and 87, the association exists before the
keyword(s) are looked up and provided (and **must exist
before** since the association is used by the lookup). By
contrast, in the Examiner's application of the Paine
publication, the association **exists only after** the other
set of terms is generated by the program.

Claims 5, 18, 31, 46, 59 and 72

First, these claims are not anticipated by the Paine
publication for at least the reasons discussed above with
reference to the claims 1, 14, 42 and 55.

Further, in rejecting dependent claims 5, 18, 31,
46, 59 and 72, the Examiner considered subaccounts as
used in paragraph [0080] of the Paine publication to be
different categories. (See Paper No. 20061008, page 4.)
The applicants strongly disagree. First, Figure 9 and
its corresponding description in paragraph [0080] merely
concern the known notion of campaign number subaccounts.
(Indeed, the main description of Paine's invention on
which the presently claimed invention is alleged to read
begins at paragraph [0093].)

*More importantly, the Examiner is interpreting
"category" inconsistently to mean both "terms" and
advertiser "subaccounts"*. The Court of Appeals for the
Federal Circuit ("the CAFC") has instructed that to
anticipate, a single prior art reference must "describe
all of the elements of the claims, *arranged as in the
[claim]*." (Emphasis added.) <u>C.R. Bard Inc. v. M3</u>

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PAGE 42/57 * RCVD AT 2/9/2009 7:47:02 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/38 * DNIS:2738300 * CSID:17329361401 * DURATION (mm-ss):08-12

Systems, Inc., 48 U.S.P.Q.2d 1225, 1230 (Fed. Cir. 1998),
cert. denied, 119 S. Ct. 1804 (1999). This is in accord
with previous Court of Claims and Patent Appeals ("the
CCPA") decisions. For example, the CCPA has instructed
that to anticipate:

> [the] reference must clearly and
> unequivocally disclose the claimed
> [invention] or direct those skilled
> in the art to the [claimed invention]
> *without any need for picking,*
> *choosing and combining various*
> *disclosures not directly related to*
> *each other* by the teachings of the
> cited reference. [Emphasis added.]

In re Arkley, 172 U.S.P.Q. 524, 526 (CCPA 1972). This
inconsistent interpretation of "category" to mean both
"terms" and advertiser "subaccounts" in the Paine
publication (both of which interpretations are improper,
as demonstrated by the applicants) shows that the Paine
publication does not describe all of the elements of the
claims, *arranged as in the claim.*

The Examiner contends that (1) each "subaccount"
identifies different keywords, and (2) keywords are
categories, and therefore (3) subaccounts are categories.
(Paper No. 20061008, page 9.) The Examiner's logic is
flawed. Using the Examiner's logic, if a "shopping list"
identifies different "groceries", one of which (e.g.,
"wine") might also be a category label, then a "shopping
list" is "wine". As the foregoing simple example
demonstrates, the logic upon which the Examiner's
rejection rests is fatally flawed.

Accordingly, dependent claims 5, 18, 31, 46, 59 and
72 are not anticipated by the Paine publication for at
least this additional reason.

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Claims 6, 19, 32, 47, 60 and 73

First, these claims are not anticipated by the Paine publication for at least the reasons discussed above with reference to the claims *1, 14, 42 and 55*.

Further, in rejecting claims 6, 19, 32, 47, 60 and 73, the Examiner contends that the third sentence of the Abstract of the Paine publication teaches performing qualification testing of one or more keywords to determine if a keyword is qualified or unqualified for use as an ad targeting keyword, and providing qualified keywords as ad targeting keywords. (See Paper No. 20061008, page 5.) The applicants respectfully disagree.

The cited portion of the Paine publication merely introduces the collaborative filtering technique of "comparing an advertiser to other, similar advertisers and recommending the search terms the other advertisers have chosen." (Abstract) Frankly, the applicants cannot fathom how this can be construed as the claimed *"qualification testing"* to see if a keyword is qualified or unqualified for use as an ad targeting keyword. The specification of the present application provides an example of such *qualification testing*, stating:

> Figure 8 is a flow diagram of an exemplary method 800 that may be used to try keywords for qualification as targeting keywords in a manner consistent with the present invention. A keyword (or more than one keyword) is accepted. (Block 810). The trial operations may use one or more keywords as targeting keywords in the serving of an ad (or even a group of ads) (Block

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820) and the performance of such ads
may be tracked (Block 830). In one
embodiment of the present invention,
the serving of the ads using trial
targeting keyword (s) may be limited to
ad spots (inventory) that otherwise
would be unused. After a certain
amount of time and/or after a certain
number of such ad serves, various
branches of the method 800 may be
performed responsive to various
different performance levels. If a
keyword performs well (e.g., in
general, or for a particular category),
it may be marked as a keyword to be
suggested, and/or as a qualified
keyword (e.g., in general, or for the
particular category) (Block 850) before
the method 800 is left (Node 870). In
fact, generic creatives (for example,
creative templates with certain
advertiser information inserted) with
qualified targeting keywords could be
subject to expedited approvals. If,
on the other hand, a keyword does not
perform well (e.g., in general, or for
a particular category), it may be
disqualified and marked as unusable
(e.g., in general, or for the
particular category) (Block 860) before
the method 800 is left (Node 870). In
this way, advertisers can avoid the
frustration of targeting their ads
using poorly performing keywords.
Although not shown, keywords can be
assigned various different status
levels associated with various
different levels or performance. In
one embodiment, performance for one or
more keywords may be considered to be
good if ads served pursuant to using
the keyword(s) as targeting keywords
perform (e.g., have a click-through
rate) comparable to what salespeople
and/or customers already think are the
best keywords (e.g., the keywords that
they are already using).

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Page 22, line 25 through page 23, line 20. As this example demonstrates, the Examiner's interpretation of "*qualification testing*" is inconsistent with how one skilled in the art would interpret this term, in light of the specification.

Thus, claims 6, 19, 32, 47, 60 and 73 are not anticipated by the Paine publication for at least this additional reason.

The Examiner had argued that the applicants do not specifically define the term "qualification testing," dubs himself as "one skilled in the art," and concludes, without substantiation, that his own broad definition of "qualification testing" is appropriate.

The applicants have noted that the specification contains an example of qualification testing. This example is consistent with the meaning that one of ordinary skill in the art at the time of the invention would have used. The Examiner's unsubstantiated assertion that he is skilled in the art frankly does not properly establish the level of ordinary skill in the art at the time of the invention. (Is the Examiner of ordinary or extraordinary skill? When did the Examiner acquire this skill? Was it at the time of the invention?) The applicants have provided evidence of how one of ordinary skill in the art at the time of the invention would interpret "qualification testing." In contrast, the Examiner has made a bald assertion of his opinion.

Claims 7-10, 20-23, 33-36, 48-51, 61-64 and 74-77

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First, these claims are not anticipated by the Paine publication for at least the reasons discussed above with reference to the claims 1, 6, 14, 19, 32, 42, 47, 55, 60 and 73.

Further, in rejecting claims 7-10, 20-23, 33-36, 48-51, 61-64 and 74-77, the Examiner simply alleges that the performance of ads served using targeting keywords is tracked, citing paragraph [0087] of the Paine publication. (See Paper No. 20061008, page 5.) However, merely **tracking performance** does not teach using such performance for purposes of **performing qualification testing** of keywords. Accordingly, these claims are not anticipated by the Paine publication for at least this additional reason.

Claims 27, 40, 41, 68, and 81-84

First, independent claims 27 and 68, as amended, recite controlling the serving of the advertisement using stored targeting keywords. This overcomes the Examiner's "mere intended use" based arguments on page 8 of the Examiner's Answer.

Independent claims 27 and 68 recite determining a category using accepted ad information, and looking up one or more serving constraints using the category determined. In rejecting these claims, the Examiner contends that since the Paine publication teaches collaborative filtering, "[b]y comparing an advertiser to other similar advertisers…, the system would have to determine the initial advertiser's product category." Paper No. 20061008, page 5. The applicants respectfully disagree.

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In the Paine publication, advertiser similarity of two advertisers is a function of terms used by the advertisers and the advertisers' ratings of those terms. (See, e.g., paragraphs [0099] through [0106] of the Paine publication.) More specifically, the Paine publication computes a Pearson correlation for use as a measure of similarity. (See, e.g., paragraphs [0102] and [0103] of the Paine publication.) This has nothing to do with determining an initial advertiser's product category as alleged by the Examiner.

Thus, claims 27, 40, 41, 68 and 81-84 are not anticipated by the Paine publication for at least this additional reason.

Claims 29, 30, 70 and 71

First, these claims are not anticipated by the Paine publication for at least the reasons discussed above with reference to claims 27 and 68.

Further, in rejecting dependent claims 29, 30, 70 and 71, the Examiner considered an advertiser Website as discussed in the Paine publication to contain ad creative information. (See Paper No. 20061008, page 4.) Although an advertiser Website might be linked to an ad, these claims recite that the ad includes ad creative information for rendering the ad and an address of a landing Webpage linked from the ad. This distinguishes the ad (and ad creative information) from an advertiser Website. Accordingly, these claims are not anticipated by the Paine publication for at least this additional reason.

The Examiner had stated:

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> Applicant argues "although an
> advertiser website might be linked to
> an ad, these claims recite that the ad
> includes ad creative information for
> rendering the ad and an address of a
> landing webpage linked from the ad".
> The Examiner would like to point out
> that the Applicant is limiting an
> advertisement that has not been
> claimed.

(Examiner's Answer, pages 12 and 13) These claims
further require that the ad landing page or ad creative
is used to determine the category (which is used to
lookup the keyword(s), at least some of which are
provided as one or more ad targeting keywords). These
further features are ignored.

Rejections under 35 U.S.C. § 103

   Claims 2, 11-13, 15, 24-26, 28, 37-39, 43, 52-54,
56, 65-67, 69 and 78-80 stand rejected under 35 U.S.C. §
103 as being unpatentable over the Paine publication.
The applicants respectfully request that the Examiner
reconsider and withdrawn this ground of rejection in view
of the following.

   As an initial matter, the Examiner had argued, "KSR
[KSR International Co. v. Teleflex Inc., 82 U.S.P.Q.2d
1385 (2007)] forecloses the argument that a specific
teaching is required for a finding of obviousness." (See
Examiner's Answer, page 15.) However, in KSR, the
Supreme Court did note that although not strictly
required, the teaching-suggestion-motivation ("TSM")

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rationale is still informative and still may be used. In
any event, the Examiner did not even:

(A) combine prior art elements according to known
methods to yield predictable results;

(B) show a simple substitution of one known element
for another to obtain predictable results;

(C) use a known technique to improve similar devices
(methods, or products) in the same way;

(D) apply a known technique to a known device
(method, or product) ready for improvement to yield
predictable results;

(E) choose from a finite number of identified,
predictable solutions, with a reasonable expectation
of success (''Obvious to try'');

(F) provide a variation of known work in one field
of endeavor for use in either the same field or a
different one based on design incentives or other
market forces if the variations would have been
predictable to one of ordinary skill in the art; or

(G) show TSM to arrive at the claimed invention.
Instead, the Examiner provided a *could be theorized*
standard to address a problem not even contemplated by
the Paine publication.

Although the Examiner alleges that the proposed
modification is "common sense", such common sense can
only be applied once the nature of the problem addressed
by the claimed invention is appreciated. The Paine
publication does not appreciate the nature of the problem
addressed by these claims. Thus, the Paine publication
does not render these claims unpatentable since it does
not even contemplate the nature of the problem to be

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solved.   (See, e.g., <u>Eibel Process Co. v. Minnesota &</u>
<u>Ontario Paper Co.</u>, 261 U.S. 45 (1923).)

Claims 2, 15, 28, 43, 56 and 69

In rejecting claims 2, 15, 28, 43, 56 and 69, the
Examiner contends that the Paine publication uses a list
of good words for an advertiser's Website and a list of
negative keywords that have no relation to the
advertiser's Website, and concludes that it would have
been obvious to one skilled in the art to include
negative keywords because doing so would allow more
accuracy in relation to relevant keywords.   (See Paper
No. 20061008, page 6.)

First, the modification of the Paine publication
proposed by the Examiner would not compensate for the
deficiencies of the Paine publication with respect to
claims 1, 14, 27, 42, 55 and 68 (from which claims 2, 15,
28, 43, 56 and 69, respectively, directly or indirectly
depend) discussed above. Therefore, these claims are not
rendered obvious by the Paine publication for at least
this reason.

Second, one skilled in the art would not have been
motivated to modify the Paine publication as proposed by
the Examiner. Specifically, the positive and negative
scores assigned to keywords is used in the context of
collaborative filtering for determining whether a new
advertiser is similar to an existing advertiser. This
has nothing to do with the use of negative keywords for
controlling the serving of ads. Further, in addition to
the fact that the Examiner provides no obvious reason in
the art for the proposed modification, the applicants
note that the use of ***negative scores*** in the Paine

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publication is not relevant to **negative keywords** in the
present claims. Consequently, claims 2, 15, 28, 43, 56
and 69 are not rendered obvious by the Paine patent for
at least this additional reason.

Claims 11, 24, 37, 52, 65 and 78

Regarding claims 11, 24, 37, 52, 65 and 78, the
Examiner concedes that the Paine publication does not
discuss the type of ad space that will be used for the ad
on a search site. To compensate for this admitted
deficiency of the Paine publication, the Examiner argues
that it is well-known that when a new ad is added to a
search page, it will be added to an ad spot that would
have otherwise been unused, and concludes that it would
have been obvious to one skilled in the art to specify
that the advertisement is to be served on a portion of a
Webpage that would otherwise have been unused, because
this would keep the operator of the search site from
overlapping other information with an ad. (Paper No.
20061008, page 6.)

First, even assuming, arguendo, that one skilled in
the art would have been motivated to modify the Paine
publication as proposed by the Examiner, since the
proposed modification of the Paine publication would not
compensate for the deficiencies of the Paine publication
with respect to claims 1, 14, 27, 42, 55 and 68 (from
which claims 11, 24, 37, 52, 65 and 78, respectively,
indirectly depend) discussed above, these claims are not
rendered obvious by the Paine publication for at least
this reason.

Second, the invention recited in these claims
concerns qualification testing of keyword (or serving

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constraint) recommendations. (See, e.g., Figure 8 of the
present application.) As stated, "In one embodiment of
the present invention, the serving of the ads using trial
targeting keyword (s) may be limited to ad spots
(inventory) that otherwise would be unused." Page 22,
line 30 through page 23, line 1. In this way, testing of
keyword recommendations has a minimal impact on the
system.

As used in the art, the term "**ad spot**" means a
portion of a document, such as a Web page, available to
show ads -- it does not mean any spot on a document. As
described in the specification:

> Suppose that the Web page has ten
> (10) ad spots and ten (10) ads are
> served. In this case, there are
> no unused ad spots, and the
> information 560 need not be
> updated. If, however, the Web
> page has ten (10) ad spots and
> only three (3) ads are served,
> there are seven (7) unused ad
> spots.

Page 20, lines 4-8.

Finally, the Examiner's conclusion that **when a new
advertisement is added to a search page, it will be added
to an ad spot that would otherwise be unused is _false_**.
Often times there are a great number of eligible ads
competing to be placed on an ad spot. If an ad (ad A) is
served, it is very often the case that another ad (ad B)
losses out to ad A, and ad B would otherwise have been
served if not for ad A. (Indeed, this is the reason why
advertisers submit bids for ad spots. If the ad spots
were necessarily otherwise unused, advertisers could bid

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nothing or a nominal amount and yet be guaranteed to be served.)

Attempting to rebut the fact established by the applicant, the Examiner contends that "a web page developer would not put 2 advertisements on top of one another in the interest of both items being viewable." (Paper No. 20061008, page 9.) However, the Examiner's position ignores the fact, understood by those skilled in the art, that an advertisement can "displace" another advertisement from an ad spot. Thus, the claims reflect a preference to serve the advertisements in instances where there would be empty ad spots over instances where another advertisement would be displaced.

Thus, claims 11, 24, 37, 52, 65, 69 and 78 are not rendered obvious by the Paine publication for at least this additional reason.

Claims 12, 13, 25, 26, 38, 39, 53, 54, 66, 67, 79 and 80

In rejecting claims 12, 13, 25, 26, 38, 39, 53, 54, 66, 67, 79 and 80, the Examiner concedes that the Paine publication does not teach ordering ads based on an amount left in unused inventory. To compensate for this admitted deficiency, the Examiner argues that it would have been obvious to one of ordinary skill in the art that the Webpage owner would want to recommend keywords to a paying advertiser for which there were more spots available to ensure that less ad spots would be unpaid for. (See Paper No. 20061008, page 6.)

First, even assuming, arguendo, that one skilled in the art would have been motivated to modify the Paine publication as proposed by the Examiner, the proposed modification of the Paine publication would not

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compensate for the deficiencies of the Paine publication
with respect to claims 1, 14, 27, 42, 55 and 68 (from
which claims 12, 13, 25, 26, 38, 39, 53, 54, 66, 67, 79
and 80 indirectly depend) discussed above. Thus, these
claims are not rendered obvious by the Paine publication
for at least this reason.

Second, these claims pertain to qualification
testing of targeting keywords. Therefore, these claims
are not rendered obvious by the Paine publication, as
discussed above, for at least this additional reason.

Third, by ordering keywords based on number of
unused ad spots associated with the keywords these claims
provide advantages not even contemplated by the Paine
publication. For example, "keywords that, if used as
targeting keywords, would fill many otherwise unused ad
spots may be preferred over those that would fill few
otherwise unused ad spots." Page 19, lines 28-30 "In
this way, keywords that, if used as targeting keywords,
would fill more ad spots may be considered first." Page
21, lines 27 and 28.

This amendment incorporates by reference, the
earlier Appeal Brief filed on June 25, 2007 and the Reply
Brief filed on November 5, 2007. Accordingly, the
arguments presented in this amendment are intended to
supplement, not replace, arguments presented in the
earlier filed Appeal Brief and Reply Brief.

Conclusion

In view of the foregoing amendments and remarks, the
applicants respectfully submit that the pending claims
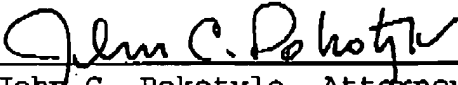are in condition for allowance. Accordingly, the

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applicants request that the Examiner pass this
application to issue.

Any arguments made in this amendment pertain **only** to
the specific aspects of the invention **claimed**. Any claim
amendments or cancellations, and any arguments, are made
without prejudice to, or disclaimer of, the applicants'
right to seek patent protection of any unclaimed (e.g.,
narrower, broader, different) subject matter, such as by
way of a continuation or divisional patent application
for example.

Since the applicants' remarks, amendments, and/or
filings with respect to the Examiner's objections and/or
rejections are sufficient to overcome these objections
and/or rejections, the applicant's silence as to
assertions by the Examiner in the Office Action and/or to
certain facts or conclusions that may be implied by
objections and/or rejections in the Office Action (such
as, for example, whether a reference constitutes prior
art, whether references have been properly combined or
modified, whether dependent claims are separately
patentable, etc.) is not a concession by the applicant
that such assertions and/or implications are accurate,
and that all requirements for an objection and/or a
rejection have been met. Thus, the applicant reserves
the right to analyze and dispute any such assertions and
implications in the future.
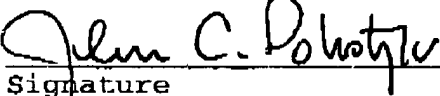
Respectfully submitted,

February 9, 2009

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

John C. Pokotylo
Type or print name of person signing certification

Signature   February 9, 2009
                                   Date

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